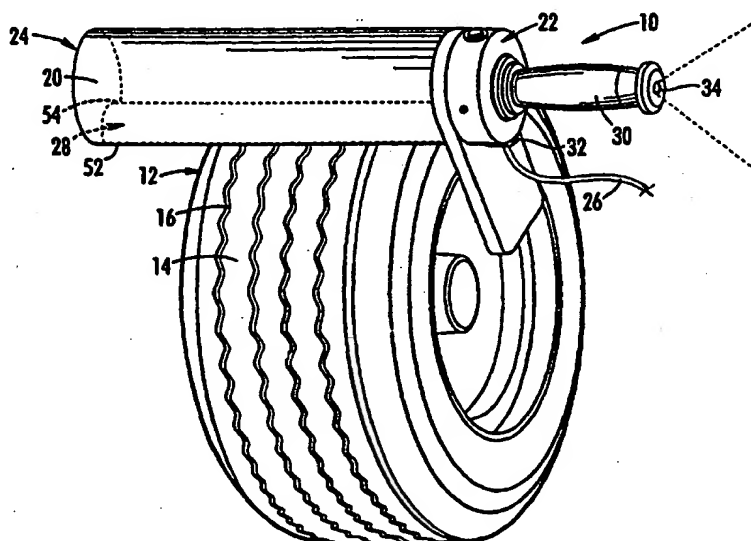




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<b>(21) International Application Number:</b> PCT/US00/00989  <b>(22) International Filing Date:</b> 14 January 2000 (14.01.00)  <b>(30) Priority Data:</b> 60/115,915                      14 January 1999 (14.01.99)                      US  <b>(71) Applicant (for all designated States except US):</b> IMAGEMAP, INC. [US/US]; 6220 Bush River Road, Columbia, SC 29212 (US).  <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> TRACY, Roger, H. [US/US]; Unit 1610, 680 North Lake Shore Drive, Chicago, IL 60611-4485 (US). REEVES, Edwin, H. [US/US]; 58 Lyme Bay, Columbia, SC 29212 (US). RADCLYFFE, Nicholas, J. [GB/GB]; The Old Dairy, Nup End Lane, Wingrave, Buckinghamshire HP22 4PX (GB). LONGDEN, Robert, Mark [GB/GB]; The Yews, Grange Park, Northington, Hampshire SO24 9TG (GB).  <b>(74) Agents:</b> HARDAWAY, John, B., III et al.; Nexsen Pruet Jacobs & Pollard, LLP, Post Office Drawer 10648, Greenville, SC 29603-0648 (US).		<b>(81) Designated States:</b> AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).  <b>Published</b> <i>With international search report.</i>

(54) Title: HAND HELD PROBE FOR MEASURING TIRE TREAD WEAR



## (57) Abstract

A hand-held probe (10) for measuring a tire tread profile comprises a housing (20) with a slit (64) formed parallel to its major axis, a range finder (70) mounted inside the housing (20) in such a way that it can traverse much of the length of the tube while directing light from a laser through a window (60) and onto a tire surface, a bracket (50) that is carried by the proximal end of the tube to enable the user to hold the probe (10) in position against the tire, a serial port (32) for connection with a computer (40), and a handle (30) that houses the batteries for operation and an IR or RF transmitter. The IR or RF transmitter is for transmitting the tire tread profile wirelessly to a computer suitably equipped to receive IR or RF transmissions.